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ABSTRACT

A rationale and guidelines are presented for using social science research methodologies to teach elementary school social studies. The goal of using these methodologies is to help children develop independent and self-directed thinking and problem-solving skills. The authors describe four research approaches and give examples of how each methodology can be applied in the elementary classroom. The approaches include historical, experimental, descriptive, and survey research methods. In historical research, an attempt is made to interpret and reconstruct past events. Oral history is a technique used in this approach. Students can interview grandparents or other adult relatives about the differences in lifestyles when they were the students' age. In experimental research, variables are manipulated to determine the effect of a particular treatment. Students can be divided into experimental and control groups to determine if tutoring younger students promotes a change in the experimental group's attitudes toward younger children. Techniques of descriptive research include participant observation, direct observation, indirect observation, and interviewing. Using any of these techniques, students can investigate what it is like to be a member of the school band. In survey research, the investigator attempts to discover attitudes or opinions held by large numbers of people concerning particular issues or ideas. Using a questionnaire developed in class, students can conduct a survey of opinions about the school lunch program. (AV)

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USING RESEARCH METHODS

in

ELEMENTARY AND MIDDLE SCHOOL SOCIAL STUDIES CLASSES

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USING RESEARCH METHODS IN ELEMENTARY AND MIDDLE SCHOOL SOCIAL STUDIES CLASSES

Few teachers would argue that elementary age children usually learn to effectively resolve socially-related problems. While some teachers do effectively employ role playing strategies for dealing with classroom-related problems, and others may employ other value or moral related techniques, much more needs to be done to promote effective social science-related problem solving. Who's and/or what's to blame?

Like most instructional problems, pinning the culprit(s) is almost as difficult as attempting to correct some situation. This paper does not attempt a comprehensive analysis into the nature of the problem. It's our opinion that college/university methods instruction often does not adequately teach or model problem solving processes. Instructional materials, particularly elementary social studies textbooks for a variety of reasons, do not present materials which would promote such instruction. Teachers, often not adequately prepared and overburdened with other "basic" curriculum demands, have not understood the importance of, or the ways to promote social problem investigation. School administrators may frequently be equally unaware of ways to assist teachers to help children grow in ability to problem solve. Indeed, some administrators fear such teaching, a fear often borne out of the fact that teachers sometimes undertake teaching children how to solve "problems" intuitively without background and/or without consideration of potential consequences the problems they select might entail.

While there are a number of alternative techniques available to assist teachers in promoting social science related problem solving, this paper

focuses on only one i.e., utilization of social science research methodologies. A rationale statement will be presented followed by a brief overview of the four basic methodologies with an elementary classroom example.

Rationale Statement

As educators, one of the first things with which we should be concerned is guiding students toward the development of independent and self-directed thinking and problem solving. While students must be given some guidance in the area of finding things out, teachers must become more concerned with how students think and the quality of student output and less concerned with teacher input. Intelligent decision making skills in a democratic society are dependent on such teaching and learning.

Four Research Methodologies

A. Historical Research Methods

Historical researchers attempt to interpret and reconstruct past events. This type of research may be compared with putting the pieces of a puzzle together as historical research involves trying to put together the pieces of the past to present a clear and valid picture of past events.

Oral History is one of the techniques used in historical research. An example activity involves interviewing subjects in order to reconstruct the past.

Example One

How many of you have grandparents living or know an older person? What things do you think might have been different in their lives from yours when they were your age? Use the following questions to interview an older person about the past and what it was like when he or she was your age?

Interview

Person's Name:

Place of Birth:

Year of Birth:

Games he or she played:

School Work:

Chores at home:

Foods he or she ate:

Clothing he or she wore:

Hair Styles:

Transportation used:

Entertainment (movies, plays, music)

The other historiographical method used involves interpretation of written materials such as letters, diaries and other documents. Here is an illustration of this approach using a catalog.

Example Two

Give a group of children a copy of the 1908 Sears Catalog and a copy of a current Sears Catalog. With their group, have them find the answers to the following questions:

1. After noting the prices of merchandise, what inferences can they make about the economy in 1908?
2. Can they find any prices on articles which are similar to today's prices for such articles? If they aren't certain, they may want to compare the prices with some recent catalogs.
3. Do they see any items which are like those they have in their homes today?
4. What electrical appliances were available to consumers in 1908?
5. What shoes were available to the consumer? What were they made of? Were any of the shoes like the ones they are wearing today? How are they alike? How are they different?
6. How or by what means did Sears get ordered merchandise to its customers?

7. Find a few things which were sold in the 1908 catalog which they would not find in a recent catalog. Then find a few items in a recent catalog. which were not available in 1908. Find a few items which they feel have changed dramatically since they appeared in 1908.

8. Have students look at the merchandise listed in this catalog: What kinds of people made up the market for this service? Make some inferences about the people who used the catalog method of shopping? Who used it? Why did they use it? Do they think they lived in urban areas or agricultural areas? Do we still use this concept of ordering merchandise today? How has Sears changed since 1908?

Experimental Research Methods

Experimentation involves manipulating variables to determine whether a particular treatment has an effect. Scientists do this in their research labs in order to expand and refine knowledge about the natural world and our environment. Children can use experimentation to produce data and information to help them investigate and make decisions. A method of experimentation in Social Studies is to have subjects placed in two groups, a control group and an experimental group. The experimental group might be given some special treatment while the control group receives no special treatment and continues in a regular routine.

Example Three

Experimental Research

Problem: Sixth graders seem particularly insensitive to needs, concerns of younger children in the school: Teacher wonders if contact with children of this age would increase knowledge and sensitivity.

Procedures: (a) Makes hypothesis

(b) Sets up design

Experimental/Control group (14 students in each)
Gives Pretest
Assigns/arranges experiences for experimental and control groups
Control group (work on a class play, recreational reading, assist teacher in room tasks)

Experimental Group (work with a first grade class in their unit entitled, "All About Me." Help teacher 45 minutes a day; read to students, help them with art work, write out their poems, etc.

(d) Post Testing

(d) Discussion of experiment with findings

Possible Pre and Post Test Items

Circle the following statements true, false, or not sure according to your opinion.

Most first graders:

1. play all day.
2. have not developed the ability to listen.
3. cannot follow directions.
4. have developed no reading and writing skills.
5. can do very little for themselves, are very helpless.
6. cannot get along with themselves or older kids.
7. cannot work in small groups.
8. do not know what is going on in the rest of the school.
9. art skills are very undeveloped.
10. cannot sit still or stay in their seats.
11. have to work very hard during the school day.

Write a short answer to items 12 through 23:

12. What kinds of things do first graders do during the course of a school day?
13. Do first graders listen and pay attention to those who are talking to them?
14. Do first graders have some reading and writing skills?
15. How well do first graders work in small groups?
16. Are first graders able to do do things for themselves? Examples?
17. How do first graders get along with each other? Do you think they can get along with older kids?

18. Do first graders seem to know about what goes on in the school?

19. What is your opinion of their art skills?

20. Were first graders able to sit still and stay in their seats some of the time?

21. Do first graders have much to do in the way of school work during the course of their school day?

22. Do first graders follow directions most of the time?

Descriptive Research Methods

The purpose of descriptive research is to describe human behavior. Groups and/or individuals are the data sources for descriptive researchers. Descriptive research involves four different methods and often in order to do a thorough study, all of the following methods or techniques are used. These techniques include: participant observation, direct observation, indirect observation, and interviewing informants of a group.

Participant Observation: The investigator becomes part of the group and participates in the daily life or routine of the group while he is observing the group.

Example Four

This method could be added to the experimental study about first graders described before.

Direct Observation: One observes without actually becoming involved in a situation.

Example Five

Student views television commercials to determine number of "Truth" claims from unsupported and/or unsubstantiated opinions.

Indirect Observation: This descriptive research involves the use of such data as pictures, artifacts, written accounts, books, and maps. Such too's

as cameras, tape recorders, and field notes provide accuracy as well as permanence to the researcher's record keeping.

Example Six

Does a recipe box give clues about a family's eating tastes, habits, etc.?

Interviewing Informants: Members of a group can be valuable sources of data. The investigator observes their behavior and asks questions about the group in terms of leadership, customs, rapport, objectives and goals and other points of interest.

Example Seven

Students will often have employ this approach in doing newspaper report research.

Students in a group might take the following illustration as a guide and use all four descriptive research procedures to investigate the activities and behavior of the same group. Have them decide as a group which procedure each individual will follow. Have them use the study outline form below to carry out and report findings. Later they may combine their efforts and complete a group outline of the study.

Example Eight

Problem or Question to be Investigated: What is it like to be a member of the school band?

Data Sources: Band members, practices and other band activities, observations, photographs, tapes, practice notes, interviews with band members, director and the principal.

Procedures: What did you do to obtain data, how do you go about it?

Means of Gathering Data: Descriptive Research Procedures, participant, direct observation, indirect observation, and interviewing informants.

Means of Processing Data: Charts, graphs, reports stating or demonstrating data in some way.

Possible Inferences to be made: Make inferences or statements which can be supported by data gained. Example: People who learn to play a musical instrument in our middle school play that same instrument in high school.

Survey Research Methods

In survey research, the investigator is interested in discovering attitudes, preferences, or opinions held by large numbers of people concerning particular ideas or issues. This method goes beyond observation as the investigator is not confronted with the difficulties of time and distance. Three important considerations must be a part of every survey. When conducting a survey, the researcher must consider:

1. What to measure
2. How to measure
3. Whom to measure

What to measure? Look at these two questions:

a. What do you think of the 12 month school year?

b. Are you in favor of a 12 month school year?

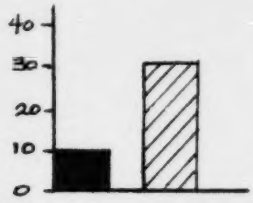
The question of what to measure needs to be defined as precisely as possible; we need to decide exactly what it is about student attitude toward the 12 month school year we need to know. Question (a) will probably yield some interesting responses, but it is vague and responses will be difficult to measure or quantify.

Look at question (b) What kind of responses can we expect? Either students will favor or oppose only as a response. Question (b) is more precisely defined and allows one to quantify or assign some measure or weighting to the responses made when processing data.

Are you in favor? yes responses - 10 Favoring

no responses - 30 Opposing

Now we demonstrate the data on a bar graph (Means of processing data).



Often surveys give respondents more choices than "in favor" or "not in favor" of. Usually five choices are available. An illustration follows. I would you favor a 12 month school year with students having four 3-week vacations between each quarter?

____strongly agree ____agree ____not sure or no opinion ____disagree ____strongly disagree

How to Measure - This part of the survey technique involves sampling. The researcher need not ask all students in school whether they favor the 12 month school year. The researcher can make valid inferences about the opinions of students in the school by sampling student responses from the school population. Two sampling procedures are defined and explained below.

Simple Random Selection. For example, if a school has a student population of 700 we may wish to sample only 10% of the studens (sampling is surveying only a portion of a population). With this procedure, we only have to make sure that the 70 students are selected by pure chance.

Stratified Random Selection. If we want to make sure that we sample equal numbers of primary and intermediate students, we could use room lists and randomly (pure chance) select 3 students from each classroom in our school.

Both sampling procedures provide "fairness" in the selection of samples and allow the student researcher to make inferences about a population without

Whom to Measure - The question of whom to measure is important as researchers need to be sure that their samples represent the various types of groups and/or individuals found in a population. For example, in a student preference pool it may be crucial to include both the responses of primary students as well as those of intermediate students.

Survey research and population sampling for opinions and ideas is a widespread practice in this country. Politicians use this procedure extensively when running for office or determining how their constituency feels about a particular bill. The Harris Poll of Sampling Service is one that possesses a great deal of credibility and enjoys strong popularity in this country. Teachers must remind students of recent state or national elections. Can they remember hearing results and inferences based on the results of different polls as to how many people would vote and the percentage of votes each candidate would receive?

Example Nine

Students could conduct their own survey within a particular school population. One problem might involve student attitudes about the school lunch program.

Student Problems

1. We don't like the menus and many of the foods served.
2. We don't like the fact that cafeteria doesn't post the menu, that we never know what we're having until we get to the cafeteria.
3. We don't like the fact that we are not allowed to talk in the lunchroom.
4. We need more time to eat our lunch.

Constructing a Questionnaire

Have students word their problems in the form of questions for the survey. Items should be constructed which are as clear, concise, and comprehensive as possible. (Give students time to formulate questions. Put all responses on the

board and help them select those which are the best defined and which will yield responses which can be quantified).

When questions are constructed, prepare a question sheet and duplicate it for use in conducting the survey. Have students decide how and whom should be sampled. Sample questions are: Do we need to survey every student? What kind of sampling procedure shall we use? Should our sampling include both primary and intermediate students? Why? (Write responses to questions on the board and guide to help students in selecting or formulating a design for their survey.) Results: To insure that our samples include representatives of the whole school population, you may wish to use stratified random selection. Get room lists from each teacher. Have students take one and select three names at random. Each student might then survey three people. Have other teachers in the school suggest times when your students could survey their students. When all survey sheets have been completed, talk to the students about ways or a means of processing this data. On the board write a sample question. Count the "yes" responses and then the "no" responses. Students could then construct a bar graph which would complete the task of processing the data. As a group or as an individual, write inferences based on the cafeteria study. Discuss inferences and also suggest that a copy of the findings be sent to each class which cooperated in the study and to the principal and cafeteria staff. (NOTE: Such a study should be cleared with the principal before it is conducted.)

Conclusion

This paper has presented rationale for the use of social science research methodologies in the teaching of elementary school social studies. Four basic research approaches were briefly explained and an elementary classroom illustration provided.

SUGGESTED READINGS

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